Mr. Alpert’s Conceptual Physics Introduction to Projectile Motion at an Angle

1. All diagonal motion may be divided into two perpendicular motions called c\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

2. These separate motions lie along the \_\_\_\_ axis and the \_\_\_\_ axis.

9. Motion in the x direction has no \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, that is, it proceeds along the x axis at a fixed rate.

10. Motion in the y direction is affected by \_\_\_\_\_\_\_\_\_\_\_\_\_ and therefore it falls according to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ due to gravity, or “g”

11. The path that a projectile takes is called its \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_. It is in the shape of a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

12. Explain why it is possible for two different angles to produce the same range as one another.

13. The \_\_\_\_\_\_\_\_\_\_\_\_ of a projectile is the distance that it travels horizontally.

14. The peak of the path of travel for a projectile is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

15. The angle of \_\_\_\_\_\_\_\_\_ degrees allows the projectile to travel the farthest.

16.